#### Pt. 63, Subpt. UUU, Table 15

 $[67~{\rm FR}~17773,~{\rm Apr.}~11,~2002,~{\rm as}~{\rm amended}~{\rm at}~70~{\rm FR}~6942~{\rm and}~6948,~{\rm Feb.}~9,~2005]$ 

## Table 15 to Subpart UUU of Part 63—Organic HAP Emission Limits for Catalytic Reforming Units

As stated in  $\S63.1566(a)(1)$ , you shall meet each emission limitation in the following table that applies to you.

For each applicable process vent for a new or existing catalytic reforming unit	You shall meet this emission limit during initial catalyst depressuring and catalyst purging operations
1. Option 1	Vent emissions to a flare that meets the requirements for control devices in §63.11(b). Visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period.
2. Option 2	Reduce uncontrolled emissions of total organic compounds (TOC) or nonmethane TOC from your process vent by 98 percent by weight using a control device or to a concentration of 20 ppmv (dry basis as hexane), corrected to 3 percent oxygen, whichever is less stringent. If you vent emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation, the vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard.

[67 FR 17773, Apr. 11, 2002, as amended at 70 FR 6942 and 6951, Feb. 9, 2005]

### TABLE 16 TO SUBPART UUU OF PART 63—OPERATING LIMITS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

As stated in  $\S63.1566(a)(2)$ , you shall meet each operating limit in the following table that applies to you.

For each new or existing catalytic reforming unit	For this type of control device	You shall meet this operating limit during initial catalyst depressuring and purging operations
1. Option 1: vent to flare	Flare that meets the requirements for control devices in § 63.11(b).	The flare pilot light must be present at all times and the flare must be operating at all times that emissions may be vented to it.
Option 2: Percent reduction or concentration limit.	a. Thermal incinerator, boiler or process heater with a design heat input capac- ity under 44 MW, or boiler or process heater in which all vent streams are not introduced into the flame zone.	The daily average combustion zone tem- perature must not fall below the limit established during the performance test.
	b. No control device	Operate at all times according to your operation, maintenance, and monitoring plan regarding minimum catalyst purging conditions that must be met prior to allowing uncontrolled purge releases.

 $[67~{\rm FR}~17773,~{\rm Apr.}~11,~2002,~{\rm as~amended~at}~70~{\rm FR}~6942~{\rm and}~6951,~{\rm Feb.}~9,~2005]$ 

# TABLE 17 TO SUBPART UUU OF PART 63—CONTINUOUS MONITORING SYSTEMS FOR ORGANIC HAP EMISSIONS FROM CATALYTIC REFORMING UNITS

As stated in  $\S63.1566(b)(1)$ , you shall meet each requirement in the following table that applies to you.

For each applicable process vent for a new or existing catalytic reforming unit	If you use this type of control device	You shall install and operate this type of continuous monitoring system
1. Option 1: vent to a flare	Flare that meets the requirements for control devices in § 63.11(b).	Monitoring device such as a thermo- couple, an ultraviolet beam sensor, or infrared sensor to continuously detect the presence of a pilot flame.
Option 2: percent reduction or concentration limit.	Thermal incinerator, process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into the flame zone.	Continuous parameter monitoring sys- tems to measure and record the com- bustion zone temperature.

#### **Environmental Protection Agency**

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Table 18 to Subpart UUU of Part 63—Requirements for Performance Tests for Organic HAP Emissions From Catalytic Reforming Units

As stated in  $\S63.1566(b)(2)$  and (3), you shall meet each requirement in the following table that applies to you.

For each new or exiting catalytic reforming unit	You must	Using	According to these requirements
1. Option 1: Vent to a flare	a. Conduct visible emission observations.	Method 22 (40 CFR part 60, appendix A).	2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test.
	<ul> <li>b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity.</li> </ul>	Not applicable.	40 CFR 63.11(b)(6) through (8).
Option 2: Percent reduction or concentration limit.	a. Select sampling site	Method 1 or 1A (40 CFR part 60, appendix A). No tra- erse site selection method is needed for vents smaller than 0.10 meter in diameter.	Sampling sites must be lo- cated at the inlet (if you elect the emission reductio standard) and outlet of the control device and prior to any releases to the atmos- phere.
	b. Measure gas volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, ap- pendix A), as applicable.	
	d. Calculate TOC or non-methons TOC omission.  C. Measure TOC or non-methons TOC or non-methons TOC omission.  C. Measure TOC or non-methods TOC or n	Method 25 (40 part 60, appendix A) to measure nonmethane TOC concentration (in carbon equivalents) at inlet and outlet of the control device. If the nonmethane TOC outlet concentration is expected to be less than 50 ppm (as carbon), you can use Method 25A to measure TOC concentration (as hexane) at the inlet and the outlet of the control device. If you use Method 25A, you may use Method 25A, you may use Method 18 (40 CFR part 60, appendix A) to measure the methane concentration to determine the nonmethane TOC concentration.	Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run.  Calculate emission rate by
	methane TOC emission rate and mass emission reduction.		Equation 1 of §63.1566 (if you use Method 25) or Equation 2 of §63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of §63.1566.
	e. For concentration standard, measure TOC concentration. (Optional: Measure methane concentration.)	Method 25A (40 CFR part 60, appendix A) to measure TOC concentration (as hexane) at the outlet of the control device. You may elect to use Method 18 (40 CFR part 60, appendix A) to measure the methane concentration.	
	f. Determine oxygen content in the gas stream at the outlet of the control device.	Method 3A or 3B (40 CFR part 60, appendix A), as applicable.	